

Applicants: Heikki Niiranen
Serial No.: 10/588,824
Filed: December 4, 2008
Response to November 16, 2010 Non-Final Office Action

REMARKS

The Non-Final Office Action mailed November 16, 2010 and the references cited therein have been carefully considered. Claims 1-12 are currently pending, although claims 1 and 2 have previously been withdrawn. Claims 1 and 2 have hereby been amended to remove reference numerals and conform the claims to the pending apparatus claims, for possible rejoinder once the apparatus claims are held to be allowable. Additionally, the specification is hereby amended to remove citations and verbiage objected to in the subject office action. Accordingly, no new matter is presented by the amendments herein. The further issues raised in the subject office action are addressed below.

Objections to the Specification and Information Disclosure Statement

Amendments to the specification have removed the references to previously cited Finnish patents therein in order to obviate this objection from the Office Action. The one reference to U.S. Patent No. 4,761,858 remains as that patent was included in Applicant's previously filed information disclosure statement. Also, the specification has been amended to remove references to specific claims. Accordingly, Applicant requests withdrawal of these objections.

Claim Rejections Under 35 U.S.C. 103

Claims 3-12 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,269,049 to Gustafsson. Applicant respectfully traverses this rejection.

Applicants: Heikki Niiranen
Serial No.: 10/588,824
Filed: December 4, 2008
Response to November 16, 2010 Non-Final Office Action

Gustafsson discloses a process and apparatus for dry forming of a material web. The airflow is guided from the suction box 8 that is situated below the wire 1 to the forming space 2 that is situated above the wire. The airflow is guided through the guiding ducts 4a-4e controlled by the regulating means 5. The Office Action admits that the disclosure of Gustafsson is distinguished from Applicant's claimed invention in that the suction box guide ducts of Gustafsson have not been divided into separate channels. However, the Office Action opines that it would have been obvious to one of ordinary skill in the art to separate such channels. Applicant particularly traverses this contention.

As an initial matter, the Office Action is contradictory in that it admits that "suction side guide ducts below the wire (being) broken into separate channels of the same number as the above wire ducts, are not required in the design of Gustafsson." Thus, if they are not required, then one of ordinary skill would not further complicate and increase the expense of the apparatus by forming such separate channels. The Office Action goes on to admit that in Gustafsson each duct is equipped with air regulating means 5, which perform the function of separately adjusting the air flow to obtain uniform transverse profile for the material web. Thus, if that is the case, then one of ordinary skill would be further led away from forming separate channels as suggested in the Office Action for the basis of the rejection.. What is more, Gustafsson particularly does not disclose forming separate channels on the suction side of the guide ducts to be of the same number as the above wire ducts. This element is not clearly demonstrated in the cited prior art. Thus, Gustafsson clearly does not disclose or suggest separating the guide ducts into channels with a corresponding matching number to the wire ducts, as particularly defined in

Applicants: Heikki Niiranen
Serial No.: 10/588,824
Filed: December 4, 2008
Response to November 16, 2010 Non-Final Office Action

claims 3 and 8. In fact, Gustafsson teaches away from such a design. Dependent claims 4, 7 and 9 further defines particular cross-sectional dimensions of the channels matching, which aspect is clearly neither disclosed or suggested by Gustafsson. A further distinction from Applicant's claimed invention is that Gustafsson does not mention or suggest that the air passage regulation be done during the operation, as particularly recited in pending claims 5 and 10.

There are further reasons why one of ordinary skill would not be motivated to modify the Gustafsson apparatus and process as suggested in the Office Action to arrive at Applicant's claimed invention. Gustafsson relates to an apparatus and process for forming long fibers that do not require the smooth and even air flow needed for short fiber forming. In contrast, the apparatus according to the pending application is arranged to form and use shorter fibers. In order to achieve an even material web, the apparatus of the pending application uses the separating channel structure mentioned above as well as a screen drum to even-out the fiber flow. The screen drum element makes the fiber flow as even as possible but also adds resistance of the fiber flow. For that reason the regulation of the apparatus according to the pending application has been arranged to both the pressure side and the suction side. The possibility to use shorter fibers makes it possible to use renewable natural fibers that are notably shorter than 20-60 mm fibers mentioned by Gustafsson. For example, chemical pulp is typical short-fibred natural fiber material, that as absorbent fiber is an excellent raw material for products requiring absorption ability (for instance towels and absorption layers of toiletries). These advantages are not achieved, disclosed or suggested by the disclosure of Gustafsson.

Applicants: Heikki Niiranen
Serial No.: 10/588,824
Filed: December 4, 2008
Response to November 16, 2010 Non-Final Office Action

Additionally, the apparatus of instant disclosure achieves further advantages that the process and apparatus according to Gustafsson cannot. For example, the Gustafsson apparatus can not be used as a single unit alone to form an even material web; it requires a second unit to function as a pair. In contrast, Applicant's apparatus feeds fibers from both sides and the former acts as an independent unit. Thus, only one former is need or alternatively an odd number of formers can be used.

Thus, Gustafsson fails to disclose or suggest all the elements of the claimed invention and it would not be obvious to modify Gustafsson to achieve the structure of the claimed apparatus. Accordingly, Applicant requests that the rejection under 35 USC §103(a) based on Gustafsson be reconsidered and withdrawn. Claims 3-12 should be allowed. What is more, as the withdrawn process claims 1 and 2 define all the elements included in claim 3, Applicant requests rejoinder.

Applicants: Heikki Niiranen
Serial No.: 10/588,824
Filed: December 4, 2008
Response to November 16, 2010 Non-Final Office Action

Conclusion

Entry of the amendments herein and favorable consideration of the claims, particularly Claims 3-12 is hereby solicited.

In view of the foregoing remarks, this application should now be in condition for allowance. A notice to this effect is respectfully requested. If the Examiner has any questions or suggestions to expedite allowance of this application, he is cordially invited to contact Applicant's attorney at the telephone number provided.

Respectfully submitted,

/tony a. gayoso/
Tony A. Gayoso
Registration No. 37,331
Attorney for Applicant

HOFFMANN & BARON, LLP
6900 Jericho Turnpike
Syosset, New York 11791
(516) 822-3550
TAG:lg

350137_1.DOC